

**SMITH MOUNTAIN PROJECT NO. 2210
APPLICATION FOR NEW LICENSE**

*PRESENTATION
TO
ROANOKE RIVER BASIN
ADVISORY COMMITTEE
April 25, 2006*

SMITH MOUNTAIN PROJECT NO. 2210

SMITH MOUNTAIN DEVELOPMENT



Smith Mountain Reservoir

Length40 miles
Shoreline..... 500miles
Water storage..... 1,142,000 acre feet
Surface Area20,600 acres
Full pond level.....795 feet N.G.V.D.

Smith Mountain Dam

Length816 feet
Height235 feet
Type.....Double curvature concrete arch
Volume of concrete.. 175,000 cubic yards
Year Completed..... 1964

Smith Mountain Powerhouse

Number of generating units.....5
Capacity
Units 1 and 5..... 66 megawatts each
Units 2 and 4 ...174 megawatts each
Unit 3106 megawatts

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LEESVILLE DEVELOPMENT



Leesville Reservoir

Length 17 miles
Shoreline 100 miles
Water storage 94,960 acre feet
Surface area 3000 acres
Normal operating range..... 600 feet to 613 feet
N.G.V.D.

Leesville Dam

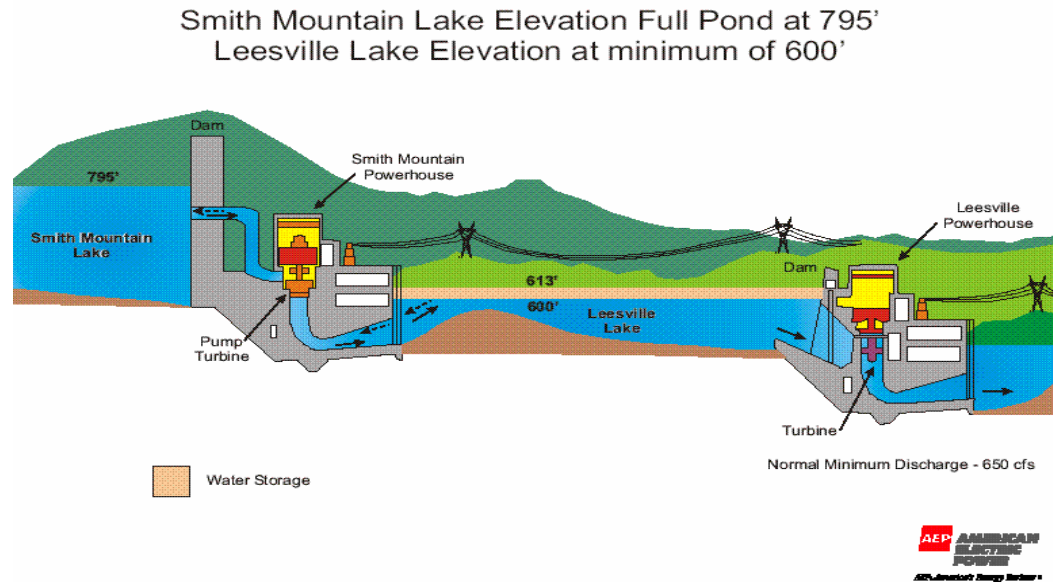
Length980 feet
Height90 feet
Type.....Concrete gravity
Volume of concrete.... 100,000 cubic yards
Year Complete 1963

Leesville Powerhouse

Number of generating units.....2
Capacity.....25 megawatts each

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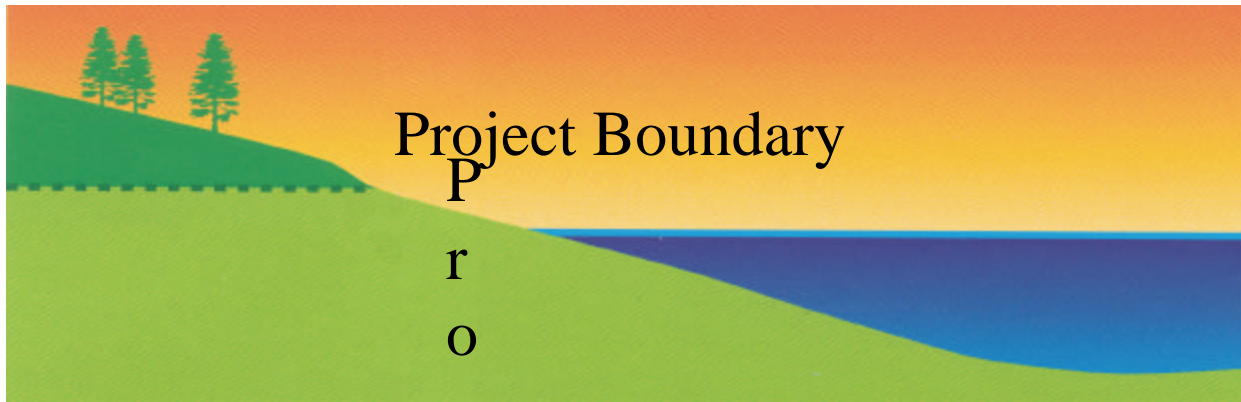
OPERATION



- Smith Mountain Reservoir can fluctuate up to 2 ft. under normal operations.
- Leesville Reservoir can fluctuate up to 13 ft. as part of the generate/pump cycle for the Smith Mountain Development.

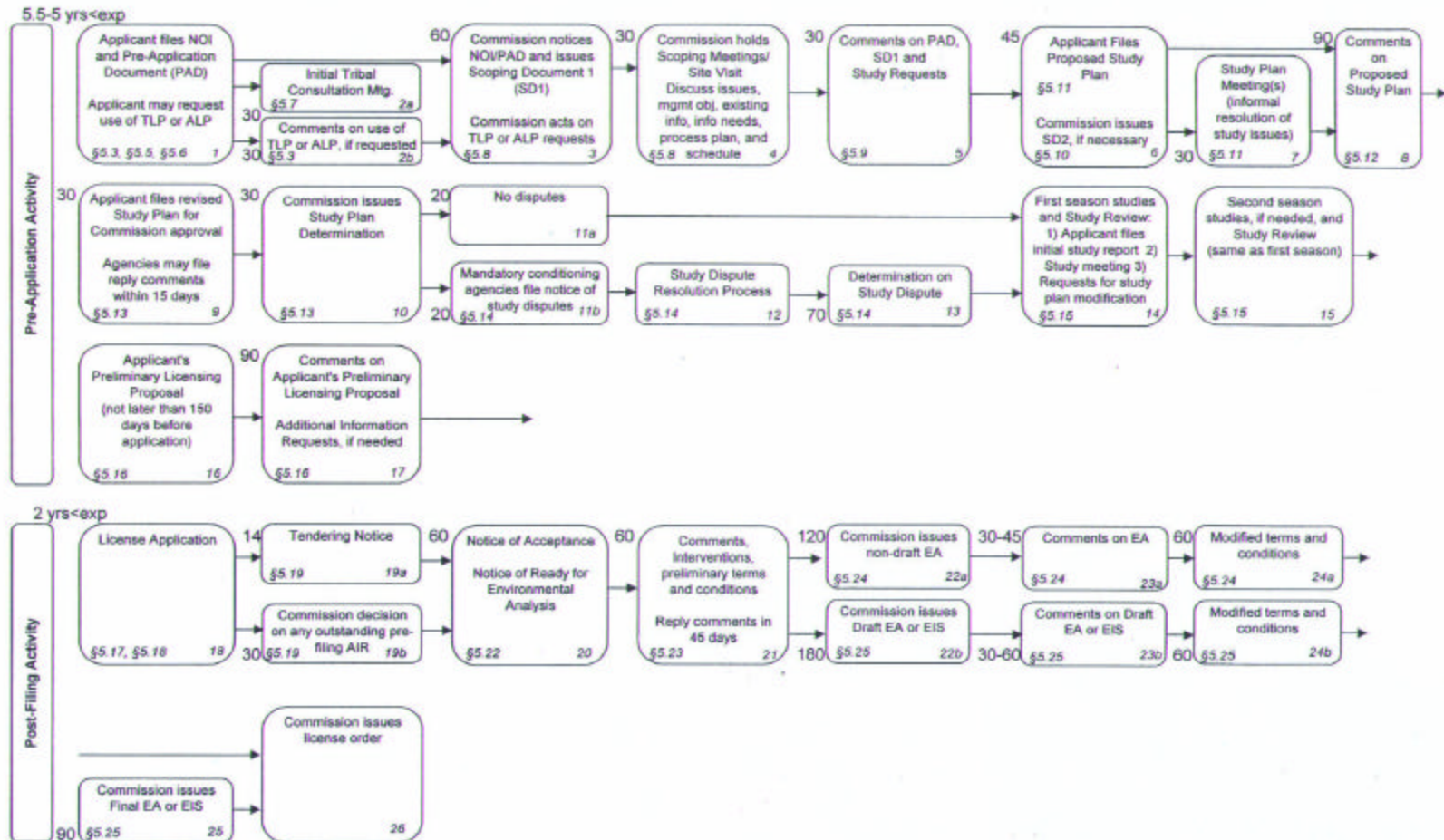
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PROJECT BOUNDARIES



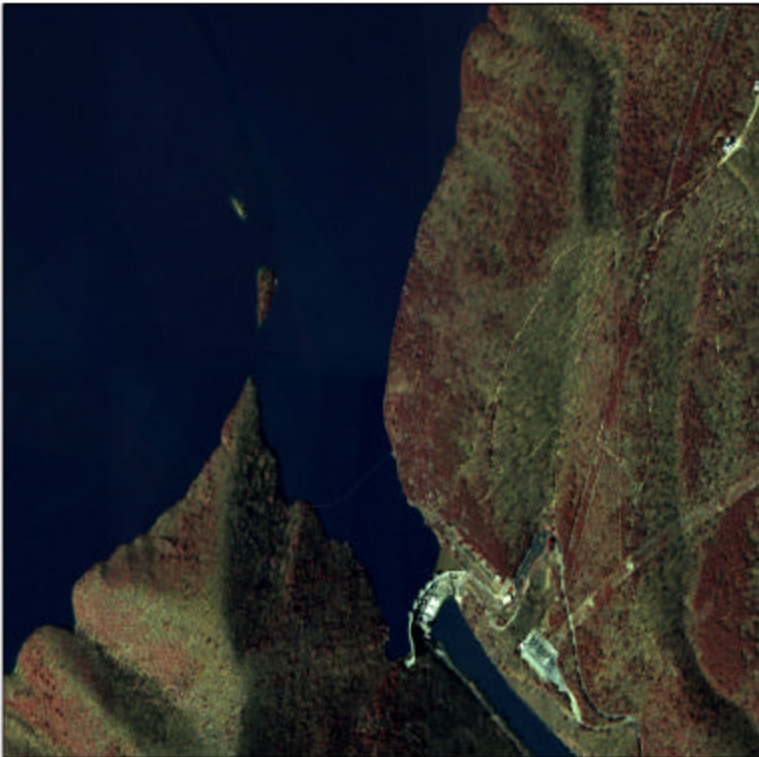
- Smith Mountain: Normal Full Pond Level = 795 ft. NGVD
Project Boundary @ Elev. 800 ft. NGVD
- Leesville: Normal Water Level = 613 ft. NGVD
Project Boundary @ Elev. 620 ft. NGVD

Integrated Licensing Process Final Rule



ACTIVITIES ACCOMPLISHED THROUGH MARCH 2006

Smith Mountain Dam Area



- Notice of Intent and Pre-Application Document Filed - 10/25/2004
- Scoping Document No. 1 Issued – 12/27/2004
- Public Scoping Meeting Held – 1/26 & 1/27, 2005
- Initial Study Plans Filed – 3/15/2005
- Scoping Document No. 2 Issued – 4/20/2005
- Initial Work Groups Meetings – 6/21/2005 thru 7/8/2005

ACTIVITIES ACCOMPLISHED THROUGH MARCH 2006 (cont'd)

Hales Ford Bridge Area



- Public Study Plans Meeting – 5/12 & 5/13, 2005
- Revised Study Plans Filed – 8/11/2005
- Study Plan Determination Issued – 9/9/2005
- Work Groups Meetings – 1/11/2006 thru 3/2/2006
- Study Plans Update Meeting No. 1 – March 29 & 30, 2006

STUDIES

- Instream Flow Needs
- Roanoke Logperch
- Erosion
- Sedimentation
- Socioeconomics
- Native & Exotic Aquatic Vegetation
- Recreation Assessment
- Angler Use Survey
- Drought & Flood Management
- Water Withdrawals
- Water Quality
- Fish Entrainment & Impingement
- Debris
- Navigational Aids
- Archaeological and Historic Resources
- Littoral Habitat and Fish Rearing



WORK GROUPS MEETINGS

• Navigational Aids	June 21, 2005
• Erosion	June 24, 2005 & January 26, 2006
• Sedimentation	June 24, 2005 & January 26, 2006
• Recreation Assessment	June 28, 2005 & February 23, 2006
• Socioeconomics	June 28, 2005 & January 20, 2006
• Debris	July 5, 2005
• Native and Exotic Aquatic Vegetation	July 5, 2005 & February 16, 2006
• Instream Flow Needs	July 6, 2005 & January 11, 2006
• Water Quality	July 7, 2005
• Fish Entrainment & Impingement	July 7, 2005
• Roanoke Logperch	July 8, 2005 & January 11, 2006
• Angler Use Survey	July 8, 2005 & February 23, 2006
• Drought and Flood Management	July 6, 2005 & March 2, 2006
• Water Withdrawals	July 6, 2005 & March 2, 2006
• Littoral Habitat and Fish Rearing	February 16, 2006
• Historic & Archaeological Resources	None

CONSULTANTS

- **Devine Tarbell & Associates:**
Roanoke Logperch
Native & Exotic Aquatic Vegetation
Littoral Habitat & Fish Rearing
- **The Louis Berger Group:**
Instream Flow Needs
Socioeconomics
Historic & Archaeological Resources
Recreation Assessment
Angler Use Survey
- **Kleinschmidt Associates:**
Erosion
Sedimentation
Water Quality
- **HydroLogics:**
Drought & Flood Management
Water Withdrawals
- **Normandeau:**
Fish Entrainment & Impingement
- **Appalachian Power Company:**
Navigational Aids
Debris

FUTURE ACTIVITIES



- First Season of Studies: 3/1 thru 12/31/2006
- Initial Study Report: 9/12/2006
- Initial Study Report Meeting: 9/27/2006
- Second Study Report & NOI to File Draft Application: 9/12/2007
(If selected by Applicant)
- Updated Study Report Meeting 9/27/2007
- File Preliminary Draft Application or License Proposal 11/2/2007
- File for 401 Certification 11/2/2007
- File Application for New License 3/31/2008

SMITH MOUNTAIN PROJECT NO. 2210 RELICENSING WEB SITE

<http://www.smithmtn.com>

